

BA

HH/HV, L.V.

Bat-1
Agriculture

Response of seedlings to Corbormone and an embryonal extract
of animal origin. L. J. Hayes (Bull. Fac. Hort. Budapest, 1960,
18, 221-223; Hort. 1960, 88, 316).—Two heart extracts,
one containing Corbormone and the other without hormone,
stimulated the development of radish seedlings. A. G. POLLARD.

HAVAS, M. ; SZEMMARY, L. ; STEINCINGER, J.

Comparative examination of the abrasion resistance of velvet coat fabrics. p. 400.

MAGYAR TEXTILTECHNIKA, (Textilipari Muszaki es Tudomanyos Egyesulet)
Budapest, Hungary, Vol. 10, no. 11/12, Dec. 1958.

Monthly list of East European Accessions (EEAI), IC, Vol. 8, No. 8,
August 1959.
Uncla.

HAVAS, Miklos, okl. gepeszmernok

Effect of the intensity of wet processing on the dimensional
change of cotton-type fabrics. Magy textil 14 no.3:119-122 Mr '62.

1. KERMI.

HAVAS, Miklos, okleveles gépészmérnök

Effect of steaming on the main properties of synthetic resin-
treated crease resistant rayon fabrics. Magyar textil 16 no. 6:
263-271 Je '64.

1. MERT Quality Control Enterprise.

HAVAS, Ottone

Manpower economy, instruction, vocational guidance. Munka szemle
8 no.12:28-32 D '64.

HAVAS, Peter

The use of input-output tables in the calculation of export
economy. Stat szemle 38 no.4:352-363 Ap '60.

HAVAS, R.; DIMITRIU, M.; COHN, J.

Serpasil treatment in chorea minor. Rumanian M. Rev. 1 no.4:40
Oct-Dec 57.

(CHOREA, ther.

reserpine in chorea minor)

(RESERPINE, ther. use

chorea minor)

HAVAS, T.

Role of physicians in enforcing discipline. Zdravot. rev., Praha 27
no.5-6:125-128 Aug 1952. (CIML 24:2)

1. M.D.

T. HAVAS

"How could we increase the fulfillment of the plan in our coal mines through improving accident prevention and sanitary conditions?" p. 11. (IARSADALOMBIZTOSITAS ES MUNKAVEDLEM, Vol. 5, no. 1/2, Jan./Feb. 1953, Budapest, Hungary.)

SO: Monthly List of East European Accessions, L.C., Vol. 2 No. 7, July 1953, Uncl.

HAVAS, Tibor, dr.

Drugs are saving lives, do not waste them. Munka 5 no.9:42-44 S '55.

1. Szakszervezetek Országos Tanácsa Tarsakalombiztosítási Főosztálya
Egészségügyi Osztályának vezetője.

WEISZ, I.; HAVAS, Z.

Preparation and properties of trimethylsilyl ethers
of some steroids. Acta phys chem Szeged 10 no.3/4, 105-
106 '64.

1. Institute of Organic Chemistry of Attila Jozsef University,
Szeged.

HAVASI, Bela

Product and production development at the Diosgyor Iron, Steel
and Machine Factory. Ujit lap 12 no.4:9 25 F '60.

1. Diosgyori Vas-, Acel- es Gepgyar fomernoke.

RENYI-VAMOS, F., Dr, CSATA, S., Dr, HAVASI, Gy., Dr, TOTTH, M., Dr; Medical University of Budapest, Urological Clinic (director: BABICS, Antal, Dr) (Budapesti Orvostudományi Egyetem, Urológiai Klinika).

"The Hepatorenal Syndrome."

Budapest, Orvosi Hetilap, Vol 107, No 41, 9 Oct 66, pages 1926-1928.

Abstract: [Authors' Hungarian summary] 1) Justifications for the "hepatorenal syndrome" designation are examined using the data of the oligo-anuric patient material of the hemodialysis section of the Urological Clinic. 2) It was found that liver lesion or jaundice is often found simultaneously with oligo-anuria. The relationship between the two processes could be elucidated in every case; such correlations which would have confirmed the presence of a special liver toxin as the cause of the renal damage could not be demonstrated, however. 3) The hepatorenal-syndrome designation is thought to be incorrect and the use of the term unjustified. 2 Hungarian, 6 Western references.

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- 84 -

HAVASI, M.; PROPPER, J.

Examination of textiles mixed with cotton, viscose synthetic fibers, and cotton synthetic fibers which have been repeatedly washed and boiled. p. 145. MAGYAR TEXTILECHNIKA. Budapest No. 4, April 1956.

SOURCE: East European Accessions List, (EEAL) Library of Congress, Vol. 5, No. 8, August, 1956.

HAVASNE BEDE, Piroška

In the heart of Slovakia: The Low Tatra. Elet tud 19 no.31:
1462-1467 31 J1 '64.

HAVASNE BEDE, Piroska

"Kisalfold", a region of Hungary. Elet tud 15 no.46:1462-
1466 13 N '60.

HAVASNE-BEDE, Piroška

Holland. Elet tud 15 no.13:367-371 20 Mr '61.

CZECHOSLOVAKIA

Col Lma NAVAŠOVA-ALTRICHTEROVA, Chief (nacelnice) Outpatient Section of Internal Medicine, Central Military Hospital (Ustredni vojenska nemocnice.)

"Hypertensive Disease in Drafted Soldiers and Problems of Evaluating It."

Prague, Vojenske Zdravotnicke Listy, Vol 31, No 3, Jun 62; pp 98-103.

Abstract [English summary modified]: Thorough discussion of hypertensive disease and its precursor stage, 'neurocirculatory asthenia', found in 413 persons 1956-1958, all but 56 younger than 24. Analysis of the symptoms, relationship to service; diagnostic evaluation for decision as to eventual aptitude for qualified military service or discharge. Six diagrams, no references.

HAVASNE BEDE, Piroska

Sarkoz; a region in Hungary. Elet tud 18 no.8:240-244
24 F '63.

CZECHOSLOVAKIA

HAVASSY, I.; KONA, E.; Institute of Experimental Biology, Slovak Academy of Sciences, and the Institute of Pathological Physiology, Veterinary Faculty (Ustav Experimentalnej Biologie SAV a Ustav Patologickej Fyziologie Vet. Fak.), Kosice.

"Glucose in the Blood and Hexoses Combined with Proteins of Blood Serum in Sheep in Posthemorrhagic Anemia."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 5, Sep 66, p 376

Abstract: The investigation was conducted under conditions of a strong anemic stress. 4 Morino sheep were fed during the experiment hay ad libitum; 1850 ml of blood was removed from each sheep in 5 operations. Under the conditions of the blood removal and blood formation the content of hexoses combined with blood serum proteins, and the content of glucose increased; after 38 days the values returned to normal. The authors explain this process by the delay required for the reestablishment of the dynamic equilibrium between the free glucose and the combined hexoses. 3 Western references. Submitted at the 3 Days of Physiology of Domestic Animals at Liblice, 8 Dec 65.

1/1

CZECHOSLOVAKIA

KONA, E.; HAVASSY, I.; Institute of Pathological Physiology, Veterinary Faculty, and Institute of Experimental Biology, Slovak Academy of Sciences (Ustav Patologickej Fyziologie Veterinarskej Fakulty a Ustav Experimentalnej Biologie SAV), Kosice.

"Study of the Distribution of Glucose Between the Red Corpuscles and the Plasma in Adult Sheep."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 5, Sep 66, p 380

Abstract: The red corpuscles of adult sheep contain no glucose or very little. Administration of glucose or of a physiological solution increases the glucose content of the corpuscles. The concentration level in healthy sheep remains unchanged for long periods. 3 Western references. Submitted at 3 Days of Physiology of Domestic Animals at Liblice, 8 Dec 65.

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HAVASSY, I.
TOCIK, A.; HAVASSY, I.

Electrophoretic-polarographic investigations on serum proteins
in allergic skin diseases. Cesk. dern. 31 no.5:269-275 Oct 56.

1. Kozna klinika LFUK v Kosiciach, prednosta doc. Dr. E. Maly
Biochemicka katedra vet. fakulty v Kosiciach, prednosta z. doc.
Dr. M. Bartik.

(SKIN DISEASES, blood in,
allergic dis., proteins, electrophoretic-polarographic
determ. (Cz))

(ALLERGY, blood in,
skin dis., proteins, electrophoretic-polarographic
determ. (Cz))

CZECHOSLOVAKIA

KONA, E.; HAVASSY, I.; ZIMMERMANN, J.; KADUK, J.; Institute of Pathological Physiology, Veterinary Faculty, College of Agriculture (Ustav Patologickej Fyziologie Veterinarskej Fakulty VSP), Kosice.

"Some Biochemical Changes in the Blood of Sheep After Intensive Bleeding."

Prague, Veterinarni Medicina, Vol 11, No-8, Aug 66, pp 517 - 522

Abstract [Authors' English summary modified]: The response of certain intermediary metabolites in the blood of adult sheep to a blood letting of 1850 ml of blood within 10 days was investigated for a period of 38 days. The curves of the levels of glucose, hexoses bound to serumproteins, and beta-hydroxybutyric acid show a maximum increase between the 5th and 11th days after blood letting and a second maximum after 20 days. Non-esterified fatty acids show an increase to a maximum on the 5th day and then decrease steadily. Albumins and gammaglobulins reach a minimum on the 11th day, and then start increasing. No changes of serum amino nitrogen and alpha globulins were observed. 1 Figure, 22 Western, 4 Czech references. (Manuscript received 14 Jul 65).
1/1

FARKAS, Laszlo (Budapest); HAVASSY, Pal., epiteszmernok (Budapest);
TOMBOR, Tibor (Budapest)

Up-to-date housing of the Hungarian National Library in
the Buda Castle. Term tud kozl 7 no.4:176-180 Ap '63.

1. Orszagos Szechenyi Konyvtar osztalyvezetoje (for Tombor).

10

S HAVE, R.

Electromagnetic Starting of Presses. R. Have. and S. Z. Brno. (Kovodelny Prumysl, 1950, June, pp. 111-112). [In Czech]. An electromagnetic starting device for presses is described which is designed to prevent any possibility of accidents. To start the machine the operator must pull two levers, one with each hand, thus ensuring that his hands are outside the danger zone.—E.G.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

Alton S
CZECHOSLOVAKIA

HAVEL, A; SOJKOVA, M; MORAVEK, J; LITOMISKA, A; REIL, I.

1. Tuberculosis Ward UVN (Oddeleni tuberkulozy UVN), Prague;
2. Research Institute of Tuberculosis (Vyzkumny ustav tuberkulozy), Prague

Prague, Rozhledy v tuberkuloze, No 5, 1963, pp 316-323

"Comparison of the Results Obtained by the Direct and Indirect Methods in Studies of Mycobacterial Drug Sensitivity."

CZECHOSLOVAKIA

SKALICKA, L; HAVEL, E., MD; HRNCIR, Z.

1. Internal Medicine Department of the Hospital OUNZ (Vnitřní oddělení nemocnice OUNZ), Hradec Kralove;
2. Eye Ward of the Polyclinic (Oční oddělení polikliniky), Nový Bydžov (for Havel); 3. Rheumatological Council KUNZ (~~Revma~~ x Revmatologická poradna KUNZ) Hradec Kralove

Prague, Vnitřní lékařství, no 11, 1963, pp 1108-1111

xx "Pathological Changes of the Cornea and Retina Accompanying Chloroquin Therapy of Internal ~~Diseases~~ Diseases."

SUCHOMEL, Jiri, inz.; HAVEL, Frantisek, inz.; STRNADOVA, Zdenka

Use of mathematical methods in the economy of the dairy industry. Prum potravin 14 no.2:57-61 F '63.

1. Vyzkumny ustav mlekarensky, Praha.

SUCHOMEL, Jiri, inz.; HAVEL, Frantisek, inz.

Use of mathematical methods in reducing the transportation costs in the dairy industry. Prum potravin 14 no.11:564-567 N'63.

1. Vyzkumny ustav mlekarensky, Praha.

L 10610-66 EWT(d) IJP(c)

ACC NR: AP6001057

SOURCE CODE: CZ/0081/65/090/002/0191/0193

AUTHOR: Havel, Ivan Gavel, I. (Prague)

ORG: none

TITLE: Completeness-number of a finite graph

SOURCE: Casopis pro pestovani matematiky, v. 90, no. 2, 1965, 191-193

TOPIC TAGS: graph theory, graphic technique

ABSTRACT: The article describes a method of adjoining a graph G' to a given finite nondirected graph G without isolated vertices. The equality $\omega(G) = \chi(G')$ is proved. [JPRS]

SUB CODE: 12 / SUBM DATE: 06Mar64 / ORIG REF: 001

Hw
Cord 1/1

HAVEL, J.; JIROUSEK, Fr.; SEBOR, J.

Our experiences with strangulated obturator hernia. Rozhl. chir. 38
no.7:490-494 July 59

1. II. chirurgická klinika lékařské fakulty UK, pobočka Plzeň, před-
nosta doc. dr. J. Spinka.
(HERNIA, INGUINAL, compl.)

ANDEL, Z.; HAVEL, J.

Comments on right hepato-lobectomy and its sequelae. Cesk. gastroent.
vz. 15 no.2:128-134 Mr '61.

1. II chirurgická klinika Lékařské fakulty KU v Plzni, přednosta doc.
dr. Josef Spinka.

(LIVER surg)

HAVEL, J.; ANDEL, Zd.; VALENTA, J.; ZUNA, Vl.

Perforation of the gastrointestinal tract by swallowed foreign bodies.
Cesk. gastroent. 16 no.1:65-67 Ja '62.

1. I. chirurgická klinika lek. fak. KU v Plzni, prednosta doc. dr.
Spinka.

(FOREIGN BODIES) (STOMACH) (INTESTINAL PERFORATION)

HAVEL, J.; MANHAL, J.

Our experiences with intestinal malrotations. Rozhl. chir. 42
no.2:126-129 F '63.

1. I. chirurgická klinika lékařské fakulty KU v Plzni, přednosta
doc. dr. J. Spinka.

(INTESTINAL OBSTRUCTION) (UMBILICAL HERNIA)
(INFANT NEWBORN DISEASES)

HAVEL, J.

Electric lighting in agriculture. p.231. v. Automatic equalization
of the power factor. p.232.

ELEKTROTECHNIK (Ministerstvo tezkeho strojirenstvi)
Praha, Czechoslovakia
Vol.14, no.7, July 1959

Monthly List of East European Accessions (EEAI) LC, Vol.8, no.11
Nov. 1959
Uncl.

HAVEL, J.

The multiplication of frequency by mixed numbers.

p. 306 (Sdelovaci Technika. Vol. 5, no. 10, Oct. 1957. Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) IC. Vol. 7, no. 2,
February 1958

HAVEL, J.

Electronic generator of random sequences. P 735

SLABOPROUDY OBZOR (Ministerstvo všeobecného strojírenství, Ministerstvo spoju
a Československá vědecko-technická společnost, sekce elektrotechnika) Praha,
Czechoslovakia, Vol. 20, no. 12 Dec. 1959

Monthly List of East European Accessions (EEAI), LC. Vol. 9, no. 2,
Feb. 1960

Uncl.

NEMEC, J.; HAVEL, J.; DUSEK, J.; KAMENICEK, O.

Bowen's disease of the conjunctiva and cornea. Cesk. oftal. 20
no.3:215-218 My '64.

1. Oční klinika lékařské fakulty PU [Palackého Universita] v Olomouci (prednosta prof. dr. V. Vejdovsky), Oční oddelení OUNZ [Obvodní ústav národního zdraví] v Prerově (vedoucí MUDr. J. Havel), Ústav patologické anatomie lek. fakulty PU [Palackého Universita] v Olomouci (prednosta doc. dr. V. Valach) a Ústřední rentgenologický ústav fakultní nemocnice v Olomouci, (vedoucí doc. dr. J. Doubravský).

SONMER, L.; HAVEL, J.

Reactions of niobium (V) with 1, 8-dihydroxynaphthalene-3,6-disulfonic acid and with 3,4-dihydroxybenzoic acid. Coll Cz Chem 29 no. 3:690-715 Mr '64.

1. Institute of Analytic Chemistry, Purkyne University, Brno.

Z/039/60/021/07/008/037
E140/E535

AUTHOR: Havel, Jan, Engineer

TITLE: Unitised Transistor Flip-flop⁵⁰ with Neon Indication

PERIODICAL: Slaboproudý obzor, 1960, Vol 21, No 7, pp 409-412

ABSTRACT: A description of a standard transistor flip-flop operating to 200 kc/s is given. Its use in a decade counter is described. A neon relaxation oscillator is employed for indication. There are 10 figures and 2 references, 1 of which is Czech and 1 English.

ASSOCIATION: Ústav teorie informace a automatizace ČSAV
(Information Theory and Automation Institute, ČSAV) ✓

SUBMITTED: March 3, 1960

Card 1/1

45780

S/194/62/000/012/094/101
D413/D308

9.2560

AUTHOR: Havel, Jan

TITLE: A switching circuit using glow-discharge tubes for indicating the state of transistorized trigger circuits

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 12, 1962, 108, abstract 12-7-215 c (Czech. pat., cl. 21g, 12/04; cl. 21g, 38, no. 100511, Aug. 15, 1961)

TEXT: A circuit for indicating the state of transistorized trigger circuits is proposed which uses glow-discharge tubes (GDT) with an auxiliary DC source. The GDT is connected in parallel with a capacitor and potentiometer; this forms a relaxation circuit. This indicating circuit has one pole connected to the trigger and the other to the auxiliary DC potential source, which is connected in series with the trigger. When the trigger is in its 0 state, a voltage is set up by the potentiometer across the GDT such that it is on the edge of striking. When the trigger goes over to its 1 state, the voltage across the indicator circuit increases and the GDT lights up. If

Card 1/2

A switching circuit ...

S/194/62/000/012/094/101
D413/D308

the current through the potentiometer is less than the maximum current through the GDT, then it will stay lit until the capacitor discharges to the extinction voltage, after which the capacitor charges up again. If the trigger is in the 1 state the whole time, the voltage across the capacitor rises again and the GDT strikes. This repeats itself at a rate determined by the potentiometer and capacitor, until the trigger goes over to state 0. For multiple indication with a large number of GDTs and a single auxiliary DC source, the strike voltage for each GDT can be set by its potentiometer. The potentiometer permits one to use an auxiliary source with a wide voltage range and gas-discharge tube stabilization. The circuit has a high sensitivity (a voltage change of 2 V is sufficient for indication), and satisfies the requirements for miniaturization. [Abstracter's note: Complete translation.] X

Card 2/2

HAVEL, Jan, inz. CSc.; CULEK, Antonin

Special counter circuits with dekatrons. Slaboproudy obzor 25 no.12:
707-714 '64.

1. Institute of Information Theory and Automation of the Czechoslovak
Academy of Sciences, Prague. Submitted May 25, 1964.

HAVEL, Jan, inz.; CULEK, Antonin

Modules for transistorized circuits. Slaboproudy obzor 22 no.5:
298-302 '61. (EEAI 10:7)

1. Ustav teorie informace a automatizace Ceskoslovenske akademie ved.
(Transistor circuits)

Z/039/63/024/002/003/006
E140/E163

AUTHOR: Havel, Jan, Engineer

TITLE: A probability transformer

PERIODICAL: Slaboproudý obzor, v.24, no.2, 1963, 83-88

TEXT: The article describes a means for obtaining other than $p = 0.5$ in a two-valued random binary process. The method consists in comparing the binary value represented by a certain number of bits in a serial realization of the binary random process $p_1 = p_2 = 1/2$ to a fixed binary number representing a threshold below which one value of the output process is realized, and above which the other value is realized. In a ten-bit model the output probability of "1" can thus be chosen to have any value from 0 to 1 in steps of 0.001 approximately. There are 8 figures and 1 table.

ASSOCIATION: Ústav teorie informace a automatizace, Praha
(Institute of Information Theory and Automation,
Card 1/1 Prague)

SUBMITTED: July 19, 1962

HAVEL, Jan, inz.

Experimental model of a simple production line. Automatizace
7 no.2:29-33 F'64

1. Ustav teorie informace a automatizace, Ceskoslovenska
akademie ved.

ACCESSION NR: AP4017188

Z/0039/64/025/003/0145/0151

AUTHOR: Havel, Jan (Engineer, candidate of sciences)

TITLE: Equipment for generating random processes

SOURCE: Slaboproudy obzor, v. 25, no. 3, 1964, 145-151

TOPIC TAGS: random process, pseudorandom number, random process generator, random number generator

ABSTRACT: A general review is given of the principles of electronic random process and random number generators. Pseudorandom numbers are explained on the basis of an English-language article by G. Marsaglia (Transactions of the Third Prague Conference [on Computers], in press). Block diagrams and brief descriptions are presented of 11 random process or random number generators, including two Czech and two Soviet. The two Czech random process generators, developed by the UTIA of CSAV, were described by this author in two articles, one English (Kovoexport, Vol 6, 1962, pp 8-12), the other Czech (Slaboproudy obzor, Vol 20, 1959, No 12, pp 735-740). The two Soviet random number generators were described in two Russian articles, one by Neyman and Paramonov (Problemy*

Card 1/2

ACCESSION NR: AP4017188

peredachi inf. AN SSSRk 1961, 9, pp 87-102), the other by Golenko and Smiryagin Publications of the Mat. Inst. of the Hungarian Academy of Sciences, Vol V, ser. A, No 3, 1960, pp 241-253). Orig. art. has: 5 formulas, 8 diagrams, 2 photographs.

ASSOCIATION: Ustav teorie informace a automatizace CSAV. (Institute for the Theory of Information and Automation)

SUBMITTED: 21Aug63

DATE ACQ: 23Mar64

ENCL: 00

SUB CODE: SP, CP

NO REF SOV: 005

OTHER: 012

Card 2/2

L 1720-66

ACCESSION NR: AP5024076

CZ/0039/64/025/012/0707/0714

AUTHOR: Havel, Jan (Engineer, Candidate of sciences); Gulek, Antonin

TITLE: Special counters designed with decatrons

SOURCE: Slahoproudý obzor, v. 25, no. 12, 1964, 707-714

TOPIC TAGS: electronic component, circuit, design, circuit reliability

ABSTRACT: The application of various types of decatrons to special counter circuits is discussed. One Czech (11TU7, by TESLA), two Soviet (OG3 and OG4), one British (GS10D) and two Swiss (EZ10B and ECT100) decatrons are compared, and the operational reliability of the Czech product is termed inadequate. Circuit diagrams, photographs and detailed descriptions are given of special (preset and reversible) counters designed with decatrons. Orig. art. has: 12 figures.

ASSOCIATION: Ustav teorie informace a automatizace CSAV, (Institute of the Czechoslovak Academy of Sciences CSAV)

SUBMITTED: 25May64

ENCL: 00

SUB CODE: EC

NR REF SOV: 000

OTHER: 006

JPRS

Card 1/1 DP

HAVEL, J.

Suppurative pylephlebitis of appendical origin in a 4-year-old child. Rozhl. chir. 44 no.10:700-702 0 '65.

1. I. chirurgicka klinika lekarske fakulty Karlovy University v Plzni (prednosta doc. dr. J. Spinka).

HAVEL, J.; NOVAK, V.

Omphalocele and gastroschisis. Rozhl. chir. 44 no.10:713-719
O '65.

1. I chirurgická klinika lékařské fakulty Karlovy University
v Plzni (prednosta doc. dr. J. Spinka).

HAVAS, J., MUDr.; HAVLIK, A., MUDr.

Gynecological mass screening action in a metropolitan health district. Cesk. zdrav. 13 no.9:472-476 S '65.

1. Okresni gynekolog, Obvodni ustav narodniho zdravi Praha 5 (for Havas). 2. Gynekologicke oddeleni, Obvodni ustav narodniho zdravi Praha 5 (for Havlik).

ACC NR: AP6032763

SOURCE CODE: CZ/0080/66/000/009/0239/0242

AUTHOR: Havel, J. (Engineer, Candidate of sciences); Skrivanek, J. (Engineer)

ORG: Institute of Information Theory and Automation, CSAV, Prague (Ustav teorie informace a automatizace CSAV)

TITLE: Certain probability problems and their solution by modeling

SOURCE: Automatizace, no. 9, 1966, 239-242

TOPIC TAGS: probabilistic automaton, analog computer, analog differential analyzer, mathematic model, model theory, Monte Carlo method

ABSTRACT: After a brief discussion of numerical modeling for the solution of probability problems, the ADAPP computer is described (Analog Differential Analyzer for solving Probability Problems) developed at UTIA of CSAV, which is employed with sectional equipment for modeling random processes. It has enough integrators to model the input filters and form continuous random processes, also quadrators to find mean values and divergences. A summator is activated by a compensation current controlled by a potentiometer. Integrators are controlled independently to govern computing circuits, memory cells, numerical voltmeter, and printer in order to record partial and commulative results. The computer has both times and leveled releases. Other equipment models random processes, such as a succession of independent variables with two values, stipulated probability, successive timed variables with a given mean

Card 1/2

UDC: 519.2

62.001.57

ACC NR: AP6032763

value and divergence, continuous Gaussian distribution with a given mean value and autocorrelative functions. An example is given of solving problems in automobile spring suspension involving six variables: wheel acceleration, body acceleration, vertical and lateral forces on spring hangers, and interrelation of these with driver acceleration. These processes were solved by the Monte Carlo method as applied to tests with model cars, tires, road surfaces, and strain on the driver. A second type of problem was solved involving timing of operations along an industrial assembly line. The third type of modeling problem is illustrated by determining the time lag from a sharp increase in voltage in a reverse current circuit to the point where it causes a line breakdown. Orig. art. has: 1 formula and 7 figures.

SUB CODE: 09, 12/ SUBM DATE: none/ ORIG REF: 007

Card 2/2

HAVEL, Jaroslav; KONDR, Miroslav

Equipment for pre ise operation of the refueling machine.
Jaderna energie 10 no.11:392-394 N '64.

1. Zavody V.I.Lenina National Enterprise, Plzen.

HAVEL, Jaroslav, inz.

Hum supression in electron tube amplifiers. Sdel tech ll no.1:
26-27 Ja '63.

L 29429-66 EWP(c)/EWP(v)/T/EWP(k)/EWP(l) IJP(c)

ACC NR: AP6006157 (A) SOURCE CODE: CZ/0078/65/000/010/0019/0019

AUTHOR: Svoboda, Jan (Plzen); Andrlik, Vaclav (Plzen); Havel, Jaroslav (Engineer, Plzen)

ORG: None

TITLE: A method for the automatic recording of defects in materials.

CZ Pat. No. PV 3200-64

SOURCE: Vynalezky, no. 10, 1965, 19

TOPIC TAGS: ultrasonic flaw detector, flaw detection

ABSTRACT: A method is described for the automatic recording of defects in materials. The defects are detected by an ultra-sound device distinguished by the feature that the defects in the material detected by the ultrasonic probe of a detectoscope act upon the recorder, which traces a topographic record in rectangular coordinates. The reflected ultrasound is converted to electrical pulses in such a way that the movement of the recorder is disturbed or interrupted and synchronized with the forward movement of the conveyer in one direction. At the same time the movement of the recording drum is mechanically synchronized with the reverse movement of the carrier in the reverse direction which is perpendicular to the first movement.

SUB CODE: 14/ SUBM DATE: 03Jun64

Card 1/1 *fv*

DERI, Erno, tanar; HAVEL, Jenő, tanar; KATONA, Mihály

Trade-union political schools in 1963-64. Munka 14 no.3:
22-23 Mr 164.

1. Szakszervezetek Országos Tanácsa Iskolája (for Deri and Havel).
2. Szakszervezetek Országos Tanácsa kulturális osztálya (for Katona).

HAVEL, JOSEF

filed ✓ Determination of thermal diffusivity of bees. Josef Havel, *Listy Cukrovar*, 72, 228-34 (1956). The cond. of heat was measured by detg. the temp. gradient between the environment (a water bath kept at const. temp.) and the middle of a bee into which a thermometer was inserted. The results were expressed by solving the differential equation for heat cond. The av. cond. was 7.7×10^{-4} cal./sq. cm. min. J. Jurcic

HAVEL, Jozsef (Szolnok)

Is the modified plan documentation an innovation? Ujit lap 13 no.2:
31 Ja '61.

1. Epitesugyi Miniszterium Szolnokmegyei Allami Epitoipari Vallalat
villamos epitesvezetoje.

(Hungary—Construction industry)
(Hungary—Economic policy)

HAVEL, Jozsef; JEMNITZ, Janos

To the memory of Francisco Ferrer. Elet tud 15 no.5:131-134
31 Ja '60.

HAVEL, Josef, inz.;

Planning and controlling of technical development tasks.
Pod org 17 no.7:310-311 JI '63.

1. Agrostroj, Jicin.

HAVEL, Josef

Mechanization of finishing work in the local building industry.
Poz stavby 13 no.1:27-30 '65.

1. Development Worksite of the North Bohemia Regional People's
Committee, Novy Bor.

HAVEL, Karel; SALAC, Josef

Relaxation oscillator with a tunnel diode. Sdel tech 11
no.6:235-236 Je '63.

KUTHAN, J.; JANECKOVA, E.; HAVEL, M.

On dihydropyridine. Pt.5. Coll Cz Chem 29 no.1:143-151 Ja'64

1. Institut fur organische Chemie und Institut fur analytische Chemie, Technische Hochschule fur Chemie, Prag.

HAVAS, Miklos, okleveles gepeszmernek

Theory and methods for investigating yarn slip in fabrics.
Magy textil 15 no.8:358-360 Ag '63.

1. KERMI.

HAVEL, OLDRICH

CZECH

✓ Fluidized bed technique. Vladimir Charvat and Oldrich Havel. *Paliva* 33, 253-8 (1963).—A simple lab. app. is described for measuring, and theories are given of the fluidized bed technique. Jos. Lederer

CZECH

✓A new numerical expression of coke reactivity. B. Tejnicky and O. Havel. *Průmysl* 34, 207-11(1954).--The purpose was to det. the reduction ability of coke. It was detd. by behavior of coke towards gases and vapors at elevated temp., especially towards CO₂. A revised numerical expression was made, which obviates the deficiencies of Kassler (C.A. 27, E940) and H. G. Šimák formulas (C.A. 31, 2787).

Jos. Lederer

HAVEL, O.; CHARVAT, V.

"Technical Problems of Suspended Layers", P. 217, (PALIVA, Vol. 34, No. 8, August 1954, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions, (REAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

HAVEL, O.

2934. EVALUATION OF BLAST FURNACE COKE. Havel, O., and Chirvat, V.
(Paliva (Fuel, Prague), 1956, vol. 36, Nos. 82-87, Apr., 110-114, Oct., 323-
334). Existing methods are reviewed and chemical methods are found to give
consistent results while physico-chemical and mechanical tests do not. A new
mechanical test is suggested and tried out, based on the strength of the coke
mass without cracks, the number of cracks and the brittleness. The practical
tests involved are modified abrasion tests in a Miron drum. (L).

HAYEL, O.

✓ 2363* (Czech) Evaluating Coke for Blast Furnaces. Hodno-
cení koksu pro vysoké pece. III. A New Method of Evaluat-
ing Coke. Nový způsob hodnocení koksu. O. Hayel and V.
Refabek. Páliva, v. 36, no. 10, Oct. 1956, p. 389-394.
✓ Describes new methods and compares mechanical testing
methods with the new method. Suggests a simple method of
evaluation of coke strength based on the results of
fragmentation resistance and dusting tests.

2

CZECHOSLOVAKIA/Chemical Technology - Chemical Products and Their H.
Application. Chemical Processing of Solid Fossil
Fuels.

Abs Jour : Ref Zhur - Khimiya, No 10, 1959, 36306

Author : Lazarev, I., Havel, O.

Inst :

Title : An Investigation of Iron Coke Production.

Orig Pub : Paliva, 1958, 38, No 3, 265-269.

Abstract : There were carried out laboratory, pilot plant and industrial experiments on the production of iron coke (IC) from schist, into the composition of which enter coal of two formations and an ore. At the industrial experiments, 1607 tons of IC were processed, schist included 11.6% of ore; its humidity, on the average, was 12.65. It was established that the coking process took place without complications; the coke yield increased 13%, including 3% of metallurgical coke; the yield of chemical

Card 1/2

H-118

HAVEL, S.

✓Antituberculosis compounds. Derivatives of cyanoacetic acid. S. Havel and P. Vetešník (Vysoká škola chem.-technol., Pardubice). *Českoslov. farm.* 5, 622-30(1958).—Cyanoacetic acid hydrazide (I) was prepd. according to Rotenberg (*Ber.* 27, 687(1894)) in 75% yield (m.p. 107.5° from EtOH). *N'*-(Alkylidene)cyanoacetyl hydrazides were prepd. by heating of equimol. amts. of I with oxo compd. in

EtOH. All the products *red* crystal. from EtOH. The following compds. were obtained: *N'*-(4-dimethylamino-benzylidene)cyanoacetyl hydrazide (81% yield, m.p. 182°), *N'*-(4-acetamidobenzylidene)cyanoacetyl hydrazide (83.5%, 113°), *N'*-(4-methylbenzylidene)cyanoacetyl hydrazide (54.2%, 166-7°), *N'*-(4-bromobenzylidene)cyanoacetyl hydrazide (II) (84.7%, 193°), *N'*-(4-bromobenzylidene)cyanoacetyl hydrazide (III) (83.2%, 145°), *N'*-(*para*-bitylidene)cyanoacetyl hydrazide (71.1%, 75.5°), *N'*-(1-phenylethylidene)cyanoacetyl hydrazide (90.5%, 152°), *N'*-(1-*p*-tolylethylidene)cyanoacetyl hydrazide (87.5%, 161°), *N'*-(cyclohexylidene)cyanoacetyl hydrazide (88.3%, 127°), and *N'*-(3-furfurylidene)cyanoacetyl hydrazide (82.2%, 190°). The most effective compd. against various strains of bacteria *in vitro* was III; less effective was I. II was active only against *Mycobacterium tuberculosis* murine type and BCG. The other compds. were not effective. R. Mack

CZECHOSLOVAKIA/Chemical Technology - Lacquers. Paints. Coatings. H-30

Abs Jour : Ref Zhur - Khimiya, No 24, 1958, 83637

Author : Weigner, J.A., Kratochvil, P., Kudlacek, Vl., Havel, St.

Inst : -

Title : Para Cresol as a Side Product in the Manufacture of New Varnishes.

Orig Pub : Chem. prumysl, 1956, 6, No 6, 221-225.

Abstract : No abstract.

Card 1/1

B-8

CZECHOSLOVAKIA/Physical Chemistry - Thermodynamics, Thermochemistry, Equilibria, Physical-Chemical Analysis, Phase Transitions.

Abs Jour : Referat Zhur - Khimiya, No 1, 1958, 418

Author : Stanislav Havel, Antonin Pospisil, Pavel Kratochvil, Vladimir Kudlacek.

Inst : -

Title : Ternary Systems Water - Benzene - Allyl Alcohol and Water - Toluene - Allyl Alcohol.

Orig Pub : Chem. prumysl, 1957, 7, No 5, 248-253

Abstract : The equilibrium liquid - liquid in the ternary systems water - benzene - allyl alcohol and water - toluene - allyl alcohol was studied at 25°. The refraction indices and densities of the ternary systems were measured at 30°. The composition of liquid equilibrium phases was determined. Triangular graphs of solubility with binodals and nodes shown on them were plotted. A correlation of

Card 1/2

CZECHOSLOVAKIA/Physical Chemistry - Thermodynamics,
Thermochemistry, Equilibria, Physical-Chemical
Analysis, Phase Transitions.

B-8

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 418

experimental data according to Ottmer-Tobias and Bachmann-
Hand was carried out.

Card 2/2

HAVEL, St.

Distr: 4E2c(j)

7

Preparation of diallyl phthalate by azeotropic esterification. J. A. Weigner, V. Kudláček, J. Bába, and St. Havel (Vysoká škola chem.-tech., Pardubice, Czech.) ~~Chem. průmysl~~ 8/33, 339-43 (1958).—The course of the prepn. of

diallyl phthalate from phthalic anhydride and allyl alc. was studied by varying the amt. of catalyst, temp. of the azeotropic distn., type of catalyst, and molar ratio of reactants. The reaction rate increased with increasing amts. of catalyst and with increasing temp. of the distn. Of the

solvents tested xylene was superior to PhMe or C₆H₆ because of its higher b.p. H₂SO₄ was a better catalyst than toluenesulfonic acid or Katex FN, an ion-exchange resin. The mole ratio of the reactants had only a minor effect on the rate. Optimum conditions for the esterification were equimolar quantities of allyl alc. and phthalic anhydride, 0.5% H₂SO₄ as catalyst, and xylene as azeotropic agent yielding 81% product. The product, purified by treatment with 25% NaOH followed by vacuum distn., b, 147-50°.

Max Hellmann

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HAVEL, S.

TECHNOLOGY

PERIODICAL: CHEMICKY PRUYSL, VOL. 11, no. 3, 1958

Havel, S. Polarographic determination of hydroxylamine and nitroethane. p. 526.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 5,
May 1959, Unclass.

HAVEL, S.

Distr: 4E2c(j)/4E3d

Chlorination of commercial divinylacetylene. Jaromir A. Weiguer, Stanislav Havel, and Vladimír Kudláček (Vysoká škola chem. technolog., Pardubice, Czech.). Chem. průmysl 9, 281-5(1959).—Distd. tech. divinylacetylene (I) (39.1 g.) was chlorinated 2-11 hrs. (Cl dried by concd. H_2SO_4) at 0-60° at a speed by which 2 moles of Cl was consumed during the first 2 hrs. The dissolved Cl was driven out from the reaction mixt. by N at 60°. The product contained the most Cl (72%) after 11 hrs. chlorination at 0°. By distn. at 5-10 mm. a product contg. 76% Cl was obtained. I (30 g.) was chlorinated 6-12 hrs. at 120-180° with 23 l. Cl per hr. The max. content of Cl (79.5%) was reached at 180° after 6 hrs. The use of 0.5% $FeCl_3$ or PCl_5 as a catalyst neither accelerated chlorination nor raised the content of Cl in the product. Chlorination products with varying content of Cl did not have pesticidal activity. I (122 g.) after chlorination at low temp. gave a product contg. 73.1% Cl, which was chlorinated 4 hrs. at 140° and 20 l. Cl per hr. to give 1,2,3,3,4,4,5,6-octachlorohexane, m. 130-1° (3:2 $CHCl_3$ -EtOH). P. Calda

6
1-9-9 (NA)
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HAVEL, S.

Preparation and properties of organic peracetic acids. p. 811.

CHYMICKÉ LISTY (Československá akademie věd. Československá společnost chemiků) Praha, Czechoslovakia. Vol. 13, No. 8, Aug. 1959.

Monthly List of East European Accessions (TEA) IC, Vol. 9, no. 1,
Jan. 1960

Uncl.

HAVEL, S.

Use of organic peracetic acids. p.928.

CHEMICKÉ LISTY (Chemoslovenska akademie ved. Chemoslovenská společnost chemická) Praha, Czechoslovakia. Vol.53, no.9, Sept.1959.

Monthly List of East European Accessions (EEAI) LC, Vol.9, no.1, Jan.1960.

Uncl.

8040c
Z/009/60/000/01/004/038
E112/E253

5.3400

AUTHORS: Havel, S., and Weigner, J. A

TITLE: The Oxidation of Phenanthrene With Peracetic Acid

PERIODICAL: Chemický průmysl, 1960, Nr 1, pp 10-16

ABSTRACT: The authors have studied the production of diphenic acid by oxidation of technical phenanthrene with peracetic acid, prepared in situ from hydrogen peroxide and glacial acetic acid. They have investigated different factors affecting yields and have attempted an interpretation of the reaction mechanism. In their studies they have followed closely experimental details given by O'Connor and Marriconi (Ref 20) who were the first to prepare diphenic acid in good yields by a one stage oxidation from phenanthrene. The oxidation medium in the present paper was 70.1% hydrogen peroxide in a solution of glacial acetic acid in presence of sulphuric acid as a catalyst. The molar proportion of hydrogen peroxide to phenanthrene was 14:1, oxidation time 3 hours at 90°C. Diphenic acid was obtained in a 74% yield calculated on the phenanthrene content of crude phenanthrene. 4

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Z/009/60/000/01/004/038
E112/E253

The Oxidation of Phenanthrene With Peracetic Acid

The mechanism of the reaction is given as follows:

Step Nr 1. Oxidation of phenanthrene to 9.10-epoxy-9.10-dihydrophenanthrene. The authors have proved that the oxidant was the peracetic acid and not hydrogen peroxide.

Step Nr 2. Hydrolysis to 9.10-dihydroxy,9.10-dihydro-phenanthrene.

Step Nr 3. Oxidation to phenanthraquinone. The oxidants in this step may be either peracetic acid or hydrogen peroxide.

Step Nr 4. Oxidation to diphenic acid. This proceeds according to the well known oxidation of o-quinones to di-carboxylic acids by means of peracids. It is suggested that diphenic acid may find applications in the field of macromolecular chemistry e.g. for the preparation of polyamides, alkyd resins by reaction with glycerol, for the production of polyesters and for plasticisers.

These polymeric materials should be particularly suitable

Card 2/3

80406

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E112/E253

The Oxidation of Phenanthrene With Peracetic Acid

where a high thermal stability^b is required. There are 7 figures, 1 table and 47 references, 25 of which are English, 9 Soviet, 2 Dutch, 1 Italian, 3 Czech and 6 German. ✓

ASSOCIATION: Katedra organické technologie, Vysoká škola chemicko-technologická, Pardubice (Department of Organic Technology, University of Chemical Technology, Pardubice)

SUBMITTED: October 5, 1959

Card 3/3

HAVEL, J.

Distr: 4E2c(j)

The oxidation of phenanthrene with peracetic acid. Stanislav Havel and Jaromír A. Weigner (Vysoká škola chem. technol., Pardubice, Czech.). Chem. průmysl 10, 10-16 (1960).—Phenanthrene (I) 76% in AcOH with H₂SO₄ was oxidized with H₂O₂ (II) under varying conditions: molar ratio of I to AcOH and II, the concn. of II, and the temp. were changed; control samples had the same compn. but contained no I. The decrease of II and peracetic acid (III) was observed in both samples. The mixt. was then poured into the same vol. of ice water to form an orange-yellow solid; a 25% soln. of NaOH was added, the whole filtered, and 50% H₂SO₄ added to the soln. to give solid diphenic acid (IV), m. 110°. The product was washed with ice water and dried at 110°. A max. yield of IV was obtained under the following conditions: concn. of II 70.1%, mol. ratio AcOH-II-I 14:14:1, 90°, 3 hrs.; yield was 74% of 90.9% pure IV (calcd. on pure I). To 3 g. 98.7% I in 100 cc. dry dioxane at 70 or 90° was added 50 g. 54.2% II and 1.5 g. H₂SO₄, and the reaction progress checked by periodically taking samples. It was found that the decrease in II in this mixt. and in the control sample (without I) was the same and I was not oxidized with II under these conditions; the presence of III was necessary in the 1st steps of oxidn. I (3 g.) (98.7%) was oxidized with 30 cc. 0.56M soln. of perbenzoic acid (V) in dry CHCl₃ at 25°, a control sample contg. a 0.56M soln. of V was run together, and the decrease of V in both samples estd. by iodometric titration. After 120 hrs. when all the V present had reacted with I, CHCl₃ was removed from the mixt. by distn. at 25-30 mm., and the yellow solid residue dissolved in dry dioxane. The presence of epoxy-groups in the product was proved with HIO₄. Thus, in the 1st step I was oxidized with org. peracids to 9,10-epoxy-9,10-dihydrophenanthrene, which was not isolated; this hydrolyzed with AcOH to 9,10-phenanthrenequinone (VI). VI could be oxidized with II to give IV.

P. Čefelín

L 11020-65 EWT(m)/EPF(n)-2/T/EWP(k)/SFA(bb)-2/EWP(v)/EWP(t)/EWP(h) ff-L/Pu-1
 SSB/AEDG(b)/AFWL/BSO JD/HM
 Z/0038/64/000/009/0322/0336
 ACCESSION NR: AP4044866

AUTHOR: Hauer, Josef (Khauyer, Y.); Havel, Stanislav (Gavel, St.); Nemec, Jaroslav (Nemets, Ya.); Stepanek, Stanislav (Shtepanek, St.)

TITLE: Pressure vessel of the first Czechoslovak nuclear electric power plant

SOURCE: Jaderna energie, no. 9, 1964, 322-336

TOPIC TAGS: pressure vessel, low carbon steel, nonaging steel, manual arc welding, impact strength, electroslag welding, automatic welding, nuclear power plant

ABSTRACT: A survey is made of investigations and determinations of the optimum dimensions and shape of the most stressed parts of the pressure vessel of the first Czechoslovak nuclear power plant, in particular, the cover, the bottom, and the inlet and exit flanges of the cooling gas tube. The reactor is D₂O moderated and CO₂ cooled. For a power output of 150 MW its diameter is about 5 m and altitude 20 m, and for an operating pressure of 65 at the cylindrical walls must be 150 mm thick. The pressure vessel is made of low-

Card 1/2

L 14020-65

ACCESSION NR: AP4044866

carbon, small-grain, non-aging steel having good mechanical properties, especially impact strength, and a minimum of permissible defects. The investigation shows that both manual arc welding and automatic electroslag welding can be successfully used for welding the heaviest parts of the pressure vessel. A program has been set up for investigating brittle hardness and the results are being checked on a model of the pressure vessel. Orig. art. has: 32 diagrams and 3 formulas.

ASSOCIATION: Zavody V. I. Lenina, Plzen.

SUBMITTED: 00

ENCL: 00

SUB CODE: NP

NO REF SOV: 002

OTHER: 00

Card 2/2

L 16047-65 EWT(m)/EWP(w)/EWA(d)/EWP(t)/EWP(b) ASD(f)-2/AFTC(p) JE/EM
ACCESSION NR: AP4045059 Z/0032/64/014/009/0686/0691

AUTHOR: Kalna, K. (Engineer); Havel, S. (Engineer)

TITLE: Experimental research on the strength of large bodies

SOURCE: Strojirenstvi, v. 14, no. 9, 1964, 686-691

TOPIC TAGS: crack propagation, crack propagation test, brittle failure, brittle failure test

18
ABSTRACT: A tensile-test machine with a capacity of 6000 Mp has begun operation at the Lenin Works (the former Skoda Works in Pilsen) primarily for testing steels intended for the pressure vessels of nuclear reactors¹⁹ for susceptibility to brittle failure and for resistance to crack propagation. The machine's heating and cooling attachments enable the tests to be conducted at any temperature from -40 to +300C. The test specimens can be up to 200 mm thick, 1200 mm wide, and 1500--3500 mm long. The length of the working stroke is 60 mm, but it can be increased to 250 mm by stepwise testing. Cracks in specimens are initiated by a pneumatic hammer. In addition to regular

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L 16047-65

ACCESSION NR: AP4045059

tensile tests, the machine was used for determining the temperature at which a brittle crack stops its propagation (Robertson's test). For this test the side with the initial crack is cooled below the nil ductility transition temperature, and the opposite side is heated. Orig. art. has: 8 figures.

ASSOCIATION: ZVIL, Pilsen

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NO REF SOV: 002

OTHER: 008

Card 2/2

HAVEL, Stanislav

Liquid-phase oxidation of aldehydes by oxygen. Chem listy
58 no.5:545-569 My '64.

1. Chair of Organic Substance Technology, Higher School of
Chemical Technology, Pardubice.

HAUER, Josef; HAVEL, Stanislav; NENEK, Jaroslav; STEPANEK, Stanislav

Pressure vessel of the first Czechoslovak nuclear power plant.
Jaderna energie 10 no.9:322-336 S '64.

1. Zavody V.I. Lenina National Enterprise, Plzen.

KALINA, K., inz.; HAVEL, S., inz.

Experimental research on the strength of large machine parts.
Strojirenstvi 14 no.9:686-691 S '64.

1. Zavody V.I. Lenina National Enterprise, Plzen.

HAVEL, Stanislav

Preparation of peracetic acid through the oxidation of acetaldehyde with oxygen. Chem prum 15 no.2:68-74 F '65.

1. Chair of the Technology of Organic Substances of the Higher School of Chemical Technology, Pardubice.

L 00710-67 EMP(m)/EMP(j) WW/JW/JWD/RM

ACC NR: AP6019422

SOURCE CODE: CZ/0009/66/000/002/0073/0078

AUTHOR: Havel, Stanislav; Greschner, Jiri

ORG: Department of the Technology of Organic Materials, College of Chemical Technology, Pardubice (Katedra technologie organických latek Vysoké školy chemickotechnologické)

TITLE: Investigation of the explosive properties of peracetic acid—I. Thermodynamic calculation of the explosive parameters of peracetic acid

SOURCE: Chemický průmysl, no. 2, 1966, 73-78

TOPIC TAGS: acetic acid, heat of explosion, liquid explosive, detonation wave

ABSTRACT: The paper is the first of two articles devoted to a theoretical and experimental study of the explosive characteristics of peracetic acid. The results of experimental tests will be given in the second paper. It is shown that the previously determined heat of formation for peracetic acid of -63.50 kcal/mol is inaccurate and that the true theoretical value is -91.430 kcal/mol. An approximate equation is given for the heat of explosion based on the theoretical formula for the explosion reaction. The results show a heat of explosion of 396.2 kcal/kg, an explosion temperature of 1193°K, a maximum thermochemical pressure of 25,880 atm, a gas volume at STP of 1179 dm³/kg, an oxygen balance of -63.1% and a charge density of 1.1037 g/cm³. Exact calculations give a heat of explosion of 900 kcal/kg, an explosive temperature of 2160°K.

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UDC: 547.292 662.23 541.126

L 00710-67

ACC NR: AP6019422

maximum thermochemical pressure of 20,100 atm, STP gas volume of 898 dm³/kg, force of $7.345 \cdot 10^4$ kgm/kg, potential of 29,015 kgm/kg and charge density of 1.1037 g/cm³. The theoretical characteristics for the pressure wave at the end of the reaction band are 51,500 atm pressure, 0.729 cm³ of gas per gram of all explosion products, 2520°K temperature, 930 m/sec axial velocity, 103,000 atm pressure jump at the wave front, 4920 m/sec detonation velocity and 1.1037 g/cm³ charge density. Orig. art. has: 3 tables, 60 formulas.

SUB CODE: .19/ SUBM DATE: 12Oct65/ ORIG REF: 007/ OTH REF: 014

Card 2/2 vlr

MELKA, J.; PEREGRIN, J.; SIMER, J.; SKRANC, O.; VESELY, U.; HAVEL, V.

The influence of the work day on the higher nervous activity of man in the framework of complex physiological analysis. (Summary of the final report). *Activ. nerv. sup.* (Praha) 7 no.1:65-66 '65.

CZECHOSLOVAKIA

HAVEL, V., SKRANC, O; Physiological Institute, Medical Faculty,
Charles University (Fyziologicky Ustav Lek. Fak. KU), Hradec
Kralove.

"The Changes and Relations of the Respiration Quotient During
Stepped-up Loading and Recovery."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, pp 118-119

Abstract: The logarithm of the value of increase of the RQ
so-called non-metabolic delta-RQ is a function of the extent of
the load, and the delta RQ is a linear function of the delta-
lactic acid. The decrease of RQ during recovery is a function
of the logarithm of the time, and corresponds to the cube of the
value of lactic acid. Delta-RQ of sportsmen is lower than that
of the average population; its value for men and women over 60
is drastically higher. The release of CO₂ and changes in the
RQ at load and recovery are sensitive indicators of the demand
on the maintenance of the acid-basic equilibrium. The increase
in oxygen demand at loading cannot be predicted. 4 Western
references. Submitted at "16 Days of Physiology" at Kosice,
28 Sep 65.

SIMEK, J.; HAVEL, V.; VESELY, C.

Contribution to the study of reticulocytes following phenylhydrazine administration. Cesk. fysiол. 8 no.6:553-554 N '59

1. Fysiologicky ustav. Lek. fak. KU Hradec Kralove.
(ERYTHROCYTE COUNT, pharmacol.)
(PHENYLHYDRAZINE, pharmacol.)

SIMEK, J.; HAVEL, V.; VESSELY, C.

Nucleic acid metabolism in the bone marrow and in the spleen in nephrectomized and anemized rats. Cesk. fysiол. 9 no.1:56-57 Ja 60.

1. Fysiologicky ustav lek. fak. KU, Hradec Kralove.

(BONE MARROW metab.)
(SPLEEN metab.)
(NUCLEIC ACID metab.)
(NEPHRECTOMY exper.)

MELKA, J.; PEREGRIN, J.; HAVEL, V.; SKRANC, O.; SIMEK, J.; VESELY, C.

Attempted determination of fatigue during the course of a very strenuous physical work. Pracovni lek. 14 no.5:231-235 Je '62.

1. Katedra fyziologie lekarske fakulty Karlovy university v Hradci Kralove, prednosta prof. MUDr. J. Melka.
(FATIGUE)